



Synonym

TNFRSF17,CD269,BCM,BCMA

Source

Human BCMA, His Tag, premium grade(BCA-H522y) is expressed from human 293 cells (HEK293). It contains AA Met 1 - Ala 54 (Accession # Q02223-1). Predicted N-terminus: Met 1

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

Molecular Characterization

BCMA(Met 1 - Ala 54) Q02223-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 7.8 kDa. The protein migrates as 12 kDa and 14-18 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.01 EU per μg by the LAL method / rFC method.

Sterility

Negative

Mycoplasma

Negative.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from $0.22~\mu m$ filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

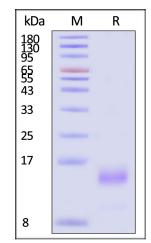
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 24 months in lyophilized state;
- -70°C for 12 months under sterile conditions after reconstitution.

SDS-PAGE

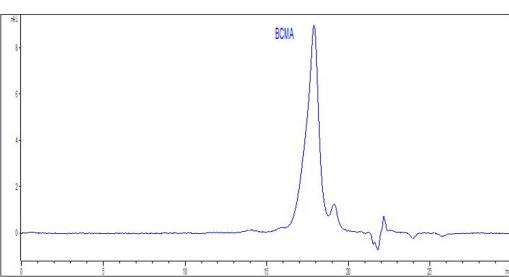


Human BCMA, His Tag, premium grade on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

Bioactivity-FACS

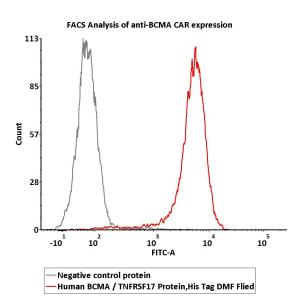


SEC-HPLC



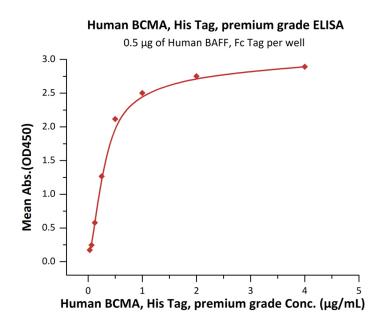
The purity of Human BCMA, His Tag, premium grade (Cat. No. BCA-H522y) was greater than 80% as determined by SEC-HPLC.



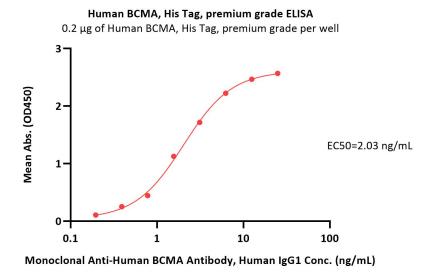


2e5 of BCMA-CAR-293 cells transfected with anti-BCMA-scFv were stained with 100 μ L of 0.3 μ g/mL of Human BCMA, His Tag, premium grade (Cat. No. BCA-H522y) and negative control protein respectively, washed and then followed by FITC anti-6xHis tag antibody and analyzed with FACS (Routinely tested).

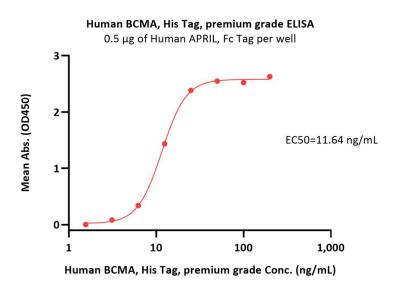
Bioactivity-ELISA



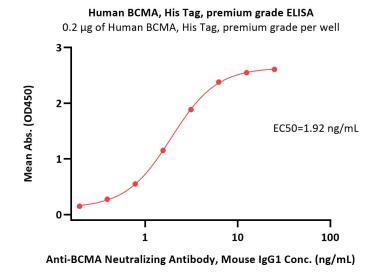
Immobilized Human BAFF, Fc Tag at 5 μ g/mL (100 μ L/well) can bind Human BCMA, His Tag, premium grade (Cat. No. BCA-H522y) with a linear range of 0.031-0.5 μ g/mL (QC tested).



Immobilized Human BCMA, His Tag, premium grade (Cat. No. BCA-H522y) at 2 μ g/mL (100 μ L/well) can bind Monoclonal Anti-Human BCMA Antibody,



Immobilized Human APRIL, Fc Tag at 5 μ g/mL (100 μ L/well) can bind Human BCMA, His Tag, premium grade (Cat. No. BCA-H522y) with a linear range of 6-25 μ g/mL (Routinely tested).



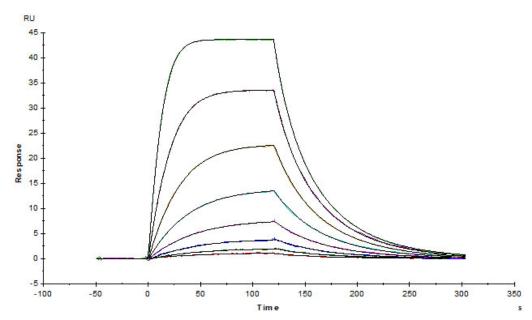
Immobilized Human BCMA, His Tag, premium grade (Cat. No. BCA-H522y) at 2 μg/mL (100 μL/well) can bind Anti-BCMA Neutralizing Antibody, Mouse





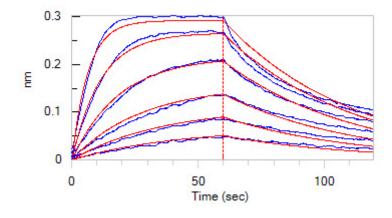
Human IgG1 with a linear range of 0.2-3 ng/mL (Routinely tested).

Bioactivity-SPR

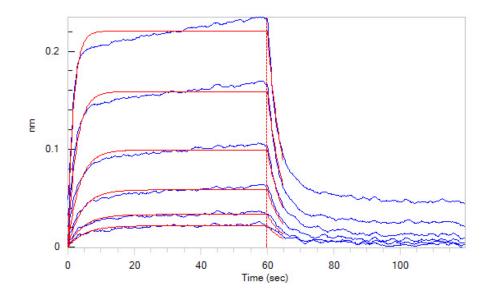


Anti-Human BCMA MAb (human IgG1) captured on CM5 chip via Anti-Human IgG Fc antibodies surface, can bind Human BCMA, His Tag, premium grade (Cat. No. BCA-H522y) with an affinity constant of 13.0 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

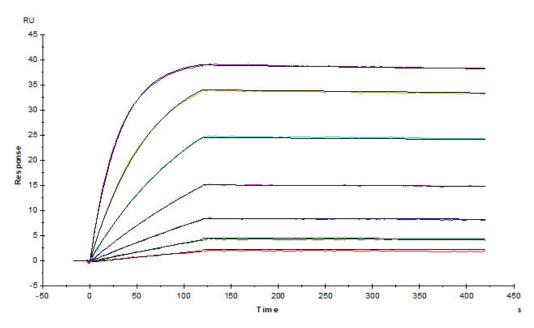
Bioactivity-BLI



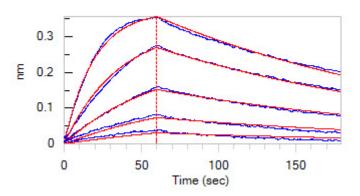
Loaded Anti-Human BCMA MAb (human IgG1) on Protein A Biosensor, can bind Human BCMA, His Tag, premium grade (Cat. No. BCA-H522y) with an affinity constant of 29.1 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



IgG1 with a linear range of 0.2-3 ng/mL (Routinely tested).



Anti-BCMA Neutralizing Antibody, Mouse IgG1 captured on CM5 chip via anti-mouse antibodies surface can bind Human BCMA, His Tag, premium grade (Cat. No. BCA-H522y) with an affinity constant of 0.234 nM as determined in a SPR assay (Biacore T200) (Routinely tested).



Loaded Human APRIL, Fc Tag on Protein A Biosensor, can bind Human BCMA, His Tag, premium grade (Cat. No. BCA-H522y) with an affinity constant of 10.9 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Human BCMA / TNFRSF17 Protein, His Tag, premium grade





Loaded Human BAFF, Fc Tag on Protein A Biosensor, can bind Human BCMA, His Tag, premium grade (Cat. No. BCA-H522y) with an affinity constant of 0.64 μ M as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Tumor necrosis factor receptor superfamily member 17 (TNFRSF17) is also known as B-cell maturation protein (BCMA), CD antigen CD269, which is a member of the TNF-receptor superfamily. TNFRSF17 contains one TNFR-Cys repeat. TNFRSF17 is expressed in mature B-cells, but not in T-cells or monocytes. TNFRSF17 is receptor for TNFSF13B/BLyS/BAFF and TNFSF13/APRIL. TNFRSF17 promotes B-cell survival and plays a role in the regulation of humoral immunity. TNFRSF17 can activate NF-kappa-B and JNK.

